

SEQUENCE LISTING

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<120> MEDICAMENT

<130> 050885-0281578

<140> PCT/GB00/00237

<141> 2000-01-28

<140> GB 9902555.3

<141> 1999-02-05

<150> 09/889,314

<151> 2001-07-16

<160> 16

<170> PatentIn Ver. 2.1

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<211> 1491

<212> DNA

<213> Chlamydia pneumoniae

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<221> CDS

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aat atc atg tct caa gtt ctg aca tcg aca ccc cag ggc gtg ccc caa	96
Asn Ile Met Ser Gln Val Leu Thr Ser Thr Pro Gln Gly Val Pro Gln	
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caa gat aag ctg tct ggc aac gaa acg aag caa ata cag caa aca cgt	144
Gln Asp Lys Leu Ser Gly Asn Glu Thr Lys Gln Ile Gln Gln Thr Arg	
35 40 45	
cag ggt aaa aac act gag atg gaa agc gat gcc act att gct ggt gct	192
Gln Gly Lys Asn Thr Glu Met Glu Ser Asp Ala Thr Ile Ala Gly Ala	
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tct gga aaa gac aaa act tcc tcg act aca aaa aca gaa aca gct cca	240
Ser Gly Lys Asp Lys Thr Ser Ser Thr Thr Lys Thr Glu Thr Ala Pro	
65 70 75 80	
caa cag gga gtt gct gct ggg aaa gaa tcc tca gaa agt caa aag gca	288
Gln Gln Gly Val Ala Ala Gly Lys Glu Ser Ser Glu Ser Gln Lys Ala	
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ggt gct gat act gga gta tca gga gcg gct gct act aca gca tca aat	336
Gly Ala Asp Thr Gly Val Ser Gly Ala Ala Ala Thr Thr Ala Ser Asn	
100 105 110	
act gca aca aaa att gct atg cag acc tct att gaa gag gcg agc aaa	384
Thr Ala Thr Lys Ile Ala Met Gln Thr Ser Ile Glu Glu Ala Ser Lys	
115 120 125	
agt atg gag tct acc tta gag tca ctt caa agc ctc agt gcc gcg caa	432
Ser Met Glu Ser Thr Leu Glu Ser Leu Gln Ser Leu Ser Ala Ala Gln	
130 135 140	
atg aaa gaa gtc gaa gcg gtt gtt gtt gct gcc ctc tca ggg aaa agt	480
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145 150 155 160	
tcg ggt tcc gca aaa ttg gaa aca cct gag ctc ccc aag ccc ggg gtg	528
Ser Gly Ser Ala Lys Leu Glu Thr Pro Glu Leu Pro Lys Pro Gly Val	
165 170 175	
aca cca aga tca gag gtt atc gaa atc gga ctc gcg ctt gct aaa gca	576
Thr Pro Arg Ser Glu Val Ile Glu Ile Gly Leu Ala Leu Ala Lys Ala	
180 185 190	
att cag aca ttg gga gaa gcc aca aaa tct gcc tta tct aac tat gca	624
Ile Gln Thr Leu Gly Glu Ala Thr Lys Ser Ala Leu Ser Asn Tyr Ala	
195 200 205	
agt aca caa gca caa gca gac caa aca aat aaa cta ggt cta gaa aag	672
Ser Thr Gln Ala Gln Ala Asp Gln Thr Asn Lys Leu Gly Leu Glu Lys	
210 215 220	
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Gln Ala Ile Lys Ile Asp Lys Glu Arg Glu Glu Tyr Gln Glu Met Lys	
225 230 235 240	
gct gcc gaa cag aag tct aaa gat ctc gaa gga aca atg gat act gtc	768
Ala Ala Glu Gln Lys Ser Lys Asp Leu Glu Gly Thr Met Asp Thr Val	
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Asn Thr Val Met Ile Ala Val Ser Val Ala Ile Thr Val Ile Ser Ile	
260 265 270	
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Val Ala Ala Ile Phe Thr Cys Gly Ala Gly Leu Ala Gly Leu Ala Ala	
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Gly Ala Ala Val Gly Ala Ala Ala Ala Gly Gly Ala Ala Gly Ala Ala	
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gcc gca acc acg gta gca aca caa att aca gtt caa gct gtt gtc caa	960
Ala Ala Thr Thr Val Ala Thr Gln Ile Thr Val Gln Ala Val Val Gln	
305 310 315 320	

gcg gtg aaa caa gct gtt atc aca gct gtc aga caa gcg atc acc gcg	1008
Ala Val Lys Gln Ala Val Ile Thr Ala Val Arg Gln Ala Ile Thr Ala	
325 330 335	
gct ata aaa gcg gct gtc aaa tct gga ata aaa gca ttt atc aaa act	1056
Ala Ile Lys Ala Ala Val Lys Ser Gly Ile Lys Ala Phe Ile Lys Thr	
340 345 350	
tta gtc aaa gcg att gcc aaa gcc att tct aaa gga atc tct aag gtt	1104
Leu Val Lys Ala Ile Ala Lys Ala Ile Ser Lys Gly Ile Ser Lys Val	
355 360 365	
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Phe Ala Lys Gly Thr Gln Met Ile Ala Lys Asn Phe Pro Lys Leu Ser	
370 375 380	
aaa gtc atc tcg tct ctt acc agt aaa tgg gtc acg gtt ggg gtt ggg	1200
Lys Val Ile Ser Ser Leu Thr Ser Lys Trp Val Thr Val Gly Val Gly	
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Val Val Val Ala Ala Pro Ala Leu Gly Lys Gly Ile Met Gln Met Gln	
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Leu Ser Glu Met Gln Gln Asn Val Ala Gln Phe Gln Lys Glu Val Gly	
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caa cag gca agt aaa att gcc tca aaa caa aca ggc gag tct aat gaa	1392
Gln Gln Ala Ser Lys Ile Ala Ser Lys Gln Thr Gly Glu Ser Asn Glu	
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atg act caa aaa gct acc aag ctg ggc gct caa atc ctt aaa gcg tat	1440
Met Thr Gln Lys Ala Thr Lys Leu Gly Ala Gln Ile Leu Lys Ala Tyr	
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gcc gca atc agc gga gcc atc gct ggc gca cat aaa acc aat aat ttt	1488
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<212> PRT

<213> Chlamydia pneumoniae

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Gly	Ala	Asp	Thr	Gly	Val	Ser	Gly	Ala	Ala	Ala	Thr	Thr	Ala	Ser	Asn	
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Thr	Ala	Thr	Lys	Ile	Ala	Met	Gln	Thr	Ser	Ile	Glu	Glu	Ala	Ser	Lys	
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Ser	Met	Glu	Ser	Thr	Leu	Glu	Ser	Leu	Gln	Ser	Leu	Ser	Ala	Ala	Gln	
	130					135					140					
Met	Lys	Glu	Val	Glu	Ala	Val	Val	Val	Ala	Ala	Leu	Ser	Gly	Lys	Ser	
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Ser	Gly	Ser	Ala	Lys	Leu	Glu	Thr	Pro	Glu	Leu	Pro	Lys	Pro	Gly	Val	
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Thr	Pro	Arg	Ser	Glu	Val	Ile	Glu	Ile	Gly	Leu	Ala	Leu	Ala	Lys	Ala	
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Ile	Gln	Thr	Leu	Gly	Glu	Ala	Thr	Lys	Ser	Ala	Leu	Ser	Asn	Tyr	Ala	
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Gln	Ala	Ile	Lys	Ile	Asp	Lys	Glu	Arg	Glu	Glu	Tyr	Gln	Glu	Met	Lys	
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Ala	Ala	Glu	Gln	Lys	Ser	Lys	Asp	Leu	Glu	Gly	Thr	Met	Asp	Thr	Val	
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Ala	Val	Lys	Gln	Ala	Val	Ile	Thr	Ala	Val	Arg	Gln	Ala	Ile	Thr	Ala
325								330				335			
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Leu	Val	Lys	Ala	Ile	Ala	Lys	Ala	Ile	Ser	Lys	Gly	Ile	Ser	Lys	Val
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370								375				380			
Lys	Val	Ile	Ser	Ser	Leu	Thr	Ser	Lys	Trp	Val	Thr	Val	Gly	Val	Gly
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405								410				415			
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420								425				430			
Lys	Leu	Gln	Ala	Ala	Ala	Asp	Met	Ile	Ser	Met	Phe	Thr	Gln	Phe	Trp
435								440				445			
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<211> 302
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<213> Artificial Sequence
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<223> Description of Artificial Sequence: Codon
optimised N-terminal section of Chlamydia
pneumoniae protein

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<221> UNSURE
<222> (1)..(30)
<223> S-tag and thrombin cleavage site
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<220>
<223> Positions (297)..(302) comprise Histidine tag
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 Asn Ile Met Ser Gln Val Leu Thr Ser Thr Pro Gln Gly Val Pro Gln
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 Gln Asp Lys Leu Ser Gly Asn Glu Thr Lys Gln Ile Gln Gln Thr Arg
 65 70 75 80
 Gln Gly Lys Asn Thr Glu Met Glu Ser Asp Ala Thr Ile Ala Gly Ala
 85 90 95
 Ser Gly Lys Asp Lys Thr Ser Ser Thr Thr Lys Thr Glu Thr Ala Pro
 100 105 110
 Gln Gln Gly Val Ala Ala Gly Lys Glu Ser Ser Glu Ser Gln Lys Ala
 115 120 125
 Gly Ala Asp Thr Gly Val Ser Gly Ala Ala Ala Thr Thr Ala Ser Asn
 130 135 140
 Thr Ala Thr Lys Ile Ala Met Gln Thr Ser Ile Glu Glu Ala Ser Lys
 145 150 155 160
 Ser Met Glu Ser Thr Leu Glu Ser Leu Gln Ser Leu Ser Ala Ala Gln
 165 170 175
 Met Lys Glu Val Glu Ala Val Val Val Ala Ala Leu Ser Gly Lys Ser
 180 185 190
 Ser Gly Ser Ala Lys Leu Glu Thr Pro Glu Leu Pro Lys Pro Gly Val
 195 200 205
 Thr Pro Arg Ser Glu Val Ile Glu Ile Gly Leu Ala Leu Ala Lys Ala
 210 215 220
 Ile Gln Thr Leu Gly Glu Ala Thr Lys Ser Ala Leu Ser Asn Tyr Ala
 225 230 235 240
 Ser Thr Gln Ala Gln Ala Asp Gln Thr Asn Lys Leu Gly Leu Glu Lys
 245 250 255
 Gln Ala Ile Lys Ile Asp Lys Glu Arg Glu Glu Tyr Gln Glu Met Lys
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